

REMARKS

Applicants thank the Office for withdrawing the rejections of the Office Action of November 30, 2007.

The presently claimed invention is drawn to a pyrogenically produced silica that comprises particles “each having a homogeneous composition”. The pyrogenically produced silica of the present claims have certain BET, DBP and tamped density characteristics recited in the present claims. It is an explicit recitation of independent Claim 1 that the claimed silica powder comprises particles “each having a homogeneous composition.”

Applicants submit that Mangold (JP 200-169132) does not disclose or suggest any silica comprising particles each having a homogeneous composition. In fact, to the contrary, Mangold discloses a silicon dioxide that is “doped with aluminum oxide” (see the Abstract of Mangold). Examples 1 and 2 of Mangold show that the doped silicon dioxide does not comprise particles each having a homogeneous composition. Instead, Mangold discloses a silicon dioxide that contains a mixture of silicon dioxide particles doped with particles of AlCl<sub>3</sub>. Examples 1 and 2 of Mangold show that the Mangold silicon dioxide is produced in a manner to provide silicon dioxide particles that do not have a homogeneous composition. The relevant disclosure of Examples 1 and 2 is reproduced below for convenience:

The aluminum chloride aerosol is passed through the heated line with the assistance of 0.5 Nm<sup>3</sup>/h of air as carrier gas, wherein the aqueous aerosol is converted into a gas and salt crystal aerosol at temperatures of about 180°C.

See paragraphs [0029] and [0041] of Mangold.

Mangold discloses in the examples that the silicon dioxide is made by mixing particles of silicon dioxide with particles in the form of salt crystals of AlCl<sub>3</sub>. Applicants submit that is readily evident to those of ordinary skill in the art that a silicon dioxide

material doped with aluminum chloride, i.e., particles of SiO<sub>2</sub> mixed with particles of AlCl<sub>3</sub>, is not a powder that comprises particles each having a homogeneous composition.

The Office relies on a translation of a Japanese document (JP 2000-169132) in the July 25 Office Action. Applicants submit that a translation of significantly improved legibility is available as the corresponding U.S. published application (i.e., U.S. 2003/0185739), a copy of which is submitted herewith.

The Office appears to be of the opinion that because the word “homogeneity” appears in Claim 2 of the English translation of JP 2000-169132, that the art relied on by the Office discloses silica particles of homogeneous composition. Applicants draw the Office’s attention to Claim 2 of the corresponding U.S. publication which makes it clear that Mangold is disclosing a process that includes “homogeneously mixing said aerosol with a flame oxidation or flame hydrolysis gas mixture within said flame” (see page 5 of Mangold US). Thus, contrary to the Office’s assertion, Mangold does not disclose a silica powder that comprises particles each having a homogeneous composition and further having the BET, DBP and tamped density properties recited in present Claim 1. Instead, Claim 2 of Mangold discloses a process in which a homogeneous mixture of an aerosol is disclosed. Mangold’s use of the word “homogeneously” as it appears in Claim 2 of Mangold US in no way discloses or suggests a silica comprising particles each having a homogeneous composition and having the DBP, BET, and tamped density properties recited in present Claim 1.

With regard to Claims 24 and 25, the Office asserts that Mangold’s disclosure of a silica party “which includes 0.21 wt.% other materials” anticipates a silica powder comprising particles which “consist of” silica. Applicants submit that this is not correct. As explained above, Mangold discloses a silicon dioxide that is doped with AlCl<sub>3</sub>. The AlCl<sub>3</sub> of Mangold is not an impurity but instead is purposefully added to the Mangold silicon dioxide. The “consists of” transitional phrase of Claim 24 must exclude the Mangold compositions

because the silica particles of Mangold include a component, i.e., a chemical compound other than silica, that must be excluded by the transitional phrase of Claim 24.

Applicants thus submit that the rejection of Claim 24 is further not supportable.

For the reasons discussed above in detail, Applicants submit that the rejection of the present claims as anticipated and/or obvious over Mangold is not supportable at least because Mangold fails to disclose or suggest a silica comprising particles each having a homogeneous composition and further having the BET, DBP and tamped density properties recited in present Claim 1.

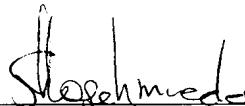
Applicants request withdrawal of the rejection and the allowance of all now-pending claims.

REQUEST FOR REJOINDER

Presently pending Claims 6-11 and 17 are withdrawn from active prosecution. Each of Claims 6-11 and 17 depends directly or indirectly from Claim 1. Upon determining that the subject matter of Claim 1 is allowable, Applicants submit that rejoinder and allowance of the presently withdrawn claims is appropriate.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon

  
\_\_\_\_\_  
Stefan U. Koschmieder

Registration No. 50,238

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/03)

NFO/SUK:sjh